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BEARING SEAL DEVICE FOR WATER PUMP, BEARING FOR WATER PUMP AND WATER PUMP
FOR WATER-COOLED ENGINE FOR AUTOMOBILE

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ABSTRACT

PROBLEM TO BE SOLVED: To provide a **bearing seal** device for a water pump, a **bearing** for a water pump, and a water pump for a water-cooled engine for an automobile to approximately reliably prevent permeation of cooling water and steam about to permeate the internal part of a **bearing** and prevent outflow of grease in a **bearing** .

SOLUTION: A **seal** ring on the impeller side comprises a **seal** ring 151 on the outer ring consisting of a reinforcing ring, a first auxiliary **lip** 1512, a main **lip** 1513, both formed of an elastic body, such as rubber or synthetic resin, and a second auxiliary **lip** 1514 positioned further on the outside diameter side than the main **lip** 1513; and a **seal** ring 152 on the haft side consisting of a first cylinder part 1521 securely fitted in a **shaft** body, an intermediate part 1522 extending to the outside diameter side therefrom, and a second cylinder part 1523 axially extending in succession thereto, and rotated with a **shaft** body. In this case, the main **lip** 1513 makes slide contact with the outer peripheral surface of the first cylinder part 1521 of the **seal** ring 152 on the **shaft** side, the first auxiliary **lip** 1512 makes slide contact with the outer peripheral surface of a rotary member located further inside in an axial direction than the main **lip** 1513. The second auxiliary **lip** 1514 makes slide contact with the **seal** ring 152 on the **shaft** side in a position on the further outside diameter side than the main **lip** 1513, and the part, extending to the outer diameter side, of the **seal** ring 152 on the **shaft** side constitutes a labyrinth **seal** between the **seal** ring 151 on the outer side and the outer ring 101.

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